

IN THE CLAIMS:

Kindly amend claims 1-5, 12, 13, 17, 25, 30 and 35-37 and add claims 38-44, all as follows, without prejudice:

1. (Currently amended) A light emitting assembly comprising  
a metal substrate providing an inorganic electrically insulating coating less than one thousand microns thickness;

a plurality of circuit traces ~~on~~ fired and thereby bonded to the inorganic electrically insulating coating providing terminals and conductive paths for placing light emitting elements in circuit, the terminals being of a composition compatible with metal droplet connections, the circuit traces having therein an inorganic dielectric material and a metal;

a plurality of light emitting elements having leads bonded to the terminals with metal droplets and providing a thermally conductive base having a flat section of predetermined area; and

a solderable thermal conductor, having therein an inorganic dielectric material and a metal, ~~fixed relative to the substrate,~~ fired and thereby bonded to the inorganic insulating coating, the thermal conductor being spaced from and electrically isolated from the circuit traces, the flat section of the base of at least some of the light emitting elements being in intimate heat exchange relation ~~physical contact~~ with the thermal conductor and thereby in

conductive heat transmitting relation with the ~~thermal conductor~~  
substrate.

2. (Currently amended) The light emitting assembly of claim 25 1 wherein the metal substrate is selected from the group consisting essentially of aluminum, aluminum alloys, magnesium, and magnesium alloys and the electrically insulating coating is an anodized layer.

3. (Currently amended) The light emitting assembly of claim 25 1 wherein the electrically insulating coating is a cured thick film coating.

4. (Currently amended) The light emitting assembly of claim 25 1 wherein the electrically insulating coating is a porcelain enamel.

5. (Currently amended) The light emitting assembly of claim 25 1 wherein the electrically insulating coating is a plasma applied coating.

6. (Previously presented) The light emitting assembly of claim 1 wherein the thermal conductor provides a shiny metal section reflecting light from the light emitting element away from the

substrate thereby increasing the reflectivity of the assembly and increasing the amount of light emitting from the assembly.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Cancelled)

11. (Cancelled)

12. (Currently amended) The light emitting assembly of claim ~~25~~ 1 wherein the circuit traces are thin film traces.

13. (Currently amended) The light emitting assembly of claim ~~25~~ 1 wherein the circuit traces are thick film traces.

14. (Cancelled)

15. (Original) The light emitting assembly of claim 1 wherein the metal droplet is a soldered connection.

16. (Original) The light emitting assembly of claim 1 wherein the metal droplet is a wire-bonded connection.

17. (Currently amended) The light emitting assembly of claim ~~25~~ 1 further comprising a resistor in thermal contact with the substrate in circuit with the light emitting element.

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Cancelled)

25. (Currently amended) A light emitting assembly comprising

a metal substrate having a surface providing an inorganic electrically insulating coating less than one thousand microns thickness;

a plurality of circuit traces on the electrically insulating coating providing terminals and conductive paths between the terminals for placing light emitting elements in circuit, the circuit traces comprising a fired inorganic dielectric material and a quantity of silver effective to make the paths conductive, to make the terminals compatible with solder or wire-bonded connections and to reflect a significant amount of light away from the substrate; and

at least one light emitting element having leads bonded to the terminals with solder or wire-bonded connections and having a flat thermally conductive base, electrically isolated from the circuit traces, the flat base being in intimate heat exchange relation ~~physical contact~~ with the dielectric coating ~~substrate~~ and thereby being in conductive heat transmitting relation with the substrate.

26. (Cancelled)

27. (Cancelled)

28. (Cancelled)

29. (Cancelled)

30. (Currently amended) A light emitting assembly comprising

a metal substrate providing an inorganic electrically insulating coating less than one thousand microns thickness;

a plurality of circuit traces on the electrically insulating coating providing terminals and conductive paths for placing light emitting elements in circuit, the terminals being of a composition compatible with metal droplet connections, the circuit traces being a fired inorganic ;

a solderable thermal conductor having therein a glass and a metal bonded to the insulating coating and thereby in conductive heat transmitting relation with the substrate; and

a plurality of light emitting elements having leads bonded to the terminals with metal droplets, the light emitting elements having a thermally conductive base, electrically isolated from the circuit traces, providing a flat section of predetermined area, the flat section being in intimate heat exchange relation ~~physical contact~~ with the ~~substrate~~ thermal conductor and thereby being in conductive heat transmitting relation with the substrate.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Previously presented) The light emitting assembly of claim 30 wherein the circuit traces comprise silver and glass.

35. (Currently amended) The light emitting assembly of claim ~~32~~ 30 wherein the metal droplet connection is solder.

36. (Currently amended) The light emitting assembly of claim 32 30 wherein the metal droplet connection is a wire-bonded connection.

37. (Currently amended) The light emitting assembly of claim ~~25~~ 30 wherein the base is of a predetermined area and all of the predetermined area is in ~~physical contact with the substrate~~ intimate heat exchange relation with the thermal conductor.

38. (New) The light emitting assembly of claim 1 wherein the electrically insulating coating is an anodized coating.

39. (New) The light emitting assembly of claim 1 wherein the terminals, circuit traces and thermal conductor lie in a common plane.

40. (New) The light emitting assembly of claim 30 wherein the terminals, circuit traces and thermal conductor lie in a common plane.

41. (New) The light emitting assembly of claim 1 wherein the inorganic dielectric coating provides a flat upper surface, the circuit traces and the thermal conductor being bonded to the flat upper surface and being of the same thickness.

42. (New) The light emitting assembly of claim 30 wherein the inorganic dielectric coating provides a flat upper surface, the circuit traces and the thermal conductor being bonded to the flat upper surface and being of the same thickness.

43. (New) The light emitting assembly of claim 1 wherein the inorganic dielectric material of the thermal conductor comprises a glass and the metal of the thermal conductor comprises silver.



44. (New) The light emitting assembly of claim 43 wherein the inorganic dielectric material of the circuit traces comprises a glass and the metal of the circuit traces comprises silver.